Combinatorial study of PtFeSe prepared by sputtering method to find out optimum composition for DMFCs cathode catalyst

이종욱, 우성일*, 이기락 KAIST (siwoo@kaist.ac.kr*)

In this study, we prepared the combinatorial catalyst array by sputtering method. This array has 98 compositions varing continously. All compositions are screened to find out optimum composition for DMFCs cathode catalyst. In combinatorial test for ORR and methanol tolerance property, $Pt_{79.2}Se_{3.7}Fe_{17.2}$ (weight ratio) compositions show high performances. The preparation and chraterization about chosen catalyst was not yet completed. We will prepare chosen catalyst by conventional impregnation method and characterize the catalyst by various tools.